

Database System with Methodology for Automated Determination and Selection of Optimal Indexes

Abstract

A database system with methodology for automated determination and selection of optimal indexes is described. In one embodiment, for example, in a database system, a method of the present invention is described for recommending database indexes to be created for optimizing system performance, the method comprises steps of: capturing a workload representative of database queries employed during system use; creating virtual indexes for optimizing system performance during execution of the database queries captured in the workload; computing cost benefits for different combinations of the virtual indexes; and recommending physical indexes to be created based on virtual indexes that have favorable cost benefits for the captured workload.